

ABSTRACT

The drive train of an all-wheel drive vehicle comprises a transfer case (2) that is connected to the motor block (1), a driven front axle (6), a driven rear axle (4), the drive shafts (3, 5) and a control device (15). To vary the torque distribution between the axles (4, 6) from 0 to 100 %: a) the transfer case (2) has a drive-through shaft (22) that has a drive connection both with the motor block (1) and the drive shaft (3) that leads to the rear axle (4), said drive-through shaft (22) having a drive connection with the drive shaft (5) that leads to the front axle (6) by means of a first friction clutch (23) that determines the torque applied to the front axle (6) and a displacement drive (26, 27, 28); and b) the rear axle (4) is equipped with an additional adjustable drive unit (7) comprising a second friction clutch (43), which is used to control the torque applied to the rear axle (4).